

Date: 1-18-01  
EXPRESS MAIL LABEL NO. EL762340516US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Junming Le, Jan Vilcek, Peter Daddona, John Ghrayeb, David M. Knight  
and Scott Siegel  
Title: ANTI-TNF ANTIBODIES AND PEPTIDES OF HUMAN TUMOR  
NECROSIS FACTOR

TRANSMITTAL OF SEQUENCE LISTING IN COMPUTER READABLE FORM  
IN COMPLIANCE WITH 37 C.F.R. §§1.821(e) AND (f)

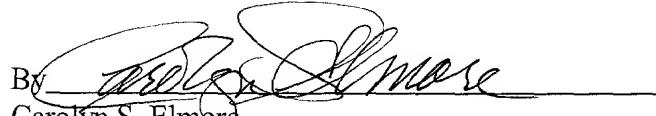
Box Sequence  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Transmitted herewith is a copy of the "Sequence Listing" in computer readable form as required by 37 C.F.R. §1.821(e). As required by 37 C.F.R. §1.821(f), Applicant's Attorney hereby states that the content of the "Sequence Listing" in paper form and of the computer readable form of the "Sequence Listing" are the same.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By   
Carolyn S. Elmore  
Registration No. 37,567  
Telephone (781) 861-6240  
Facsimile (781) 861-9540

Lexington, Massachusetts 02421-4799

Date: 1/18/01

## SEQUENCE LISTING

<110> Junming Le  
Jan Vilcek  
Peter Daddona  
John Ghrayeb  
David M. Knight  
Scott Siegel

<120> Anti-TNF Antibodies and Peptides of  
Human Tumor Necrosis Factor

<130> 0975.1005-010

<150> U.S. 09/133,119  
<151> 1998-08-12

<150> U.S. 08/570,674  
<151> 1995-12-11

<150> U.S. 08/324,799  
<151> 1994-10-18

<150> U.S. 08/192,102  
<151> 1994-02-04

<150> U.S. 08/192,861  
<151> 1994-02-04

<150> U.S. 08/192,093  
<151> 1994-02-04

<150> U.S. 08/010,406  
<151> 1993-01-29

<150> U.S. 08/013,413  
<151> 1993-02-02

<150> U.S. 07/943,852  
<151> 1992-09-11

<150> U.S. 07/853,606  
<151> 1992-03-18

<150> U.S. 07/670,827  
<151> 1991-03-18

<160> 19

<170> FastSEQ for Windows Version 4.0

<210> 1  
<211> 157  
<212> PRT  
<213> Peptide

<400> 1  
 Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val  
 1 5 10 15  
 Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg  
 20 25 30  
 Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu  
 35 40 45  
 Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe  
 50 55 60  
 Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile  
 65 70 75 80  
 Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala  
 85 90 95  
 Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys  
 100 105 110  
 Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys  
 115 120 125  
 Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe  
 130 135 140  
 Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu  
 145 150 155

03766Eg3E  
 > 044894  
 <210> 2  
 <211> 321  
 <212> DNA  
 <213> cDNA  
  
 <220>  
 <221> CDS  
 <222> (0)...(321)

<400> 2  
 gac atc ttg ctg act cag tct cca gcc atc ctg tct gtg agt cca gga 48  
 Asp Ile Leu Leu Thr Gln Ser Pro Ala Ile Leu Ser Val Ser Pro Gly  
 1 5 10 15  
  
 gaa aga gtc agt ttc tcc tgc agg gcc agt cag ttc gtt ggc tca agc 96  
 Glu Arg Val Ser Phe Ser Cys Arg Ala Ser Gln Phe Val Gly Ser Ser  
 20 25 30  
  
 atc cac tgg tat cag caa aga aca aat ggt tct cca agg ctt ctc ata 144  
 Ile His Trp Tyr Gln Gln Arg Thr Asn Gly Ser Pro Arg Leu Leu Ile  
 35 40 45  
  
 aag tat gct tct gag tct atg tct ggg atc cct tcc agg ttt agt ggc 192  
 Lys Tyr Ala Ser Glu Ser Met Ser Gly Ile Pro Ser Arg Phe Ser Gly  
 50 55 60  
  
 agt gga tca ggg aca gat ttt act ctt agc atc aac act gtg gag tct 240  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Ser Ile Asn Thr Val Glu Ser  
 65 70 75 80  
  
 gaa gat att gca gat tat tac tgt caa caa agt cat agc tgg cca ttc 288  
 Glu Asp Ile Ala Asp Tyr Tyr Cys Gln Gln Ser His Ser Trp Pro Phe  
 85 90 95

acg ttc ggc tcg ggg aca aat ttg gaa gta aaa 321  
 Thr Phe Gly Ser Gly Thr Asn Leu Glu Val Lys  
 100 105

<210> 3  
 <211> 107  
 <212> PRT  
 <213> Protein

<400> 3  
 Asp Ile Leu Leu Thr Gln Ser Pro Ala Ile Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Val Ser Phe Ser Cys Arg Ala Ser Gln Phe Val Gly Ser Ser  
 20 25 30  
 Ile His Trp Tyr Gln Gln Arg Thr Asn Gly Ser Pro Arg Leu Leu Ile  
 35 40 45  
 Lys Tyr Ala Ser Glu Ser Met Ser Gly Ile Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Ser Ile Asn Thr Val Glu Ser  
 65 70 75 80  
 Glu Asp Ile Ala Asp Tyr Tyr Cys Gln Gln Ser His Ser Trp Pro Phe  
 85 90 95  
 Thr Phe Gly Ser Gly Thr Asn Leu Glu Val Lys  
 100 105

<210> 4  
 <211> 357  
 <212> DNA  
 <213> cDNA

<220>  
 <221> CDS  
 <222> (0) ... (357)

<400> 4  
 gaa gtg aag ctt gag gag tct gga gga ggc ttg gtg caa cct gga gga 48  
 Glu Val Lys Leu Glu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
 1 5 10 15

tcc atg aaa ctc tcc tgt gtt gcc tct gga ttc att ttc agt aac cac 96  
 Ser Met Lys Leu Ser Cys Val Ala Ser Gly Phe Ile Phe Ser Asn His  
 20 25 30

tgg atg aac tgg gtc cgc cag tct cca gag aag ggg ctt gag tgg gtt 144  
 Trp Met Asn Trp Val Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Val  
 35 40 45

gct gaa att aga tca aaa tct att aat tct gca aca cat tat gcg gag 192  
 Ala Glu Ile Arg Ser Lys Ser Ile Asn Ser Ala Thr His Tyr Ala Glu  
 50 55 60

tct gtg aaa ggg agg ttc acc atc tca aga gat gat tcc aaa agt gct 240  
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ala  
 65 70 75 80

gtc tac ctg caa atg acc gac tta aga act gaa gac act ggc gtt tat	288
Val Tyr Leu Gln Met Thr Asp Leu Arg Thr Glu Asp Thr Gly Val Tyr	
85 90 95	
tac tgt tcc agg aat tac tac ggt agt acc tac gac tac tgg ggc caa	336
Tyr Cys Ser Arg Asn Tyr Tyr Gly Ser Thr Tyr Asp Tyr Trp Gly Gln	
100 105 110	
ggc acc act ctc aca gtc tcc	357
Gly Thr Thr Leu Thr Val Ser	
115	

<210> 5  
 <211> 119  
 <212> PRT  
 <213> Protein

<400> 5  
 Glu Val Lys Leu Glu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
 1 5 10 15  
 Ser Met Lys Leu Ser Cys Val Ala Ser Gly Phe Ile Phe Ser Asn His  
 20 25 30  
 Trp Met Asn Trp Val Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ala Glu Ile Arg Ser Lys Ser Ile Asn Ser Ala Thr His Tyr Ala Glu  
 50 55 60  
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ala  
 65 70 75 80  
 Val Tyr Leu Gln Met Thr Asp Leu Arg Thr Glu Asp Thr Gly Val Tyr  
 85 90 95  
 Tyr Cys Ser Arg Asn Tyr Tyr Gly Ser Thr Tyr Asp Tyr Trp Gly Gln  
 100 105 110  
 Gly Thr Thr Leu Thr Val Ser  
 115

<210> 6  
 <211> 8  
 <212> PRT  
 <213> Protein

<400> 6  
 Gly Thr Leu Val Thr Val Ser Ser  
 1 5

<210> 7  
 <211> 7  
 <212> PRT  
 <213> Protein

<400> 7  
 Gly Thr Lys Leu Glu Ile Lys  
 1 5

<210> 8  
 <211> 20  
 <212> DNA  
 <213> cDNA

<400> 8  
 cctggatacc tgtgaaaaga

20

<210> 9  
 <211> 27  
 <212> DNA  
 <213> cDNA

<400> 9  
 cctggtacct tagtcaccgt ctccctca

27

<210> 10  
 <211> 27  
 <212> DNA  
 <213> cDNA

<400> 10  
 aatagatatc tccttcaaca cctgcaa

27

<210> 11  
 <211> 21  
 <212> DNA  
 <213> cDNA

<400> 11  
 atcgggacaa agttggaaat a

21

<210> 12  
 <211> 16  
 <212> DNA  
 <213> cDNA

<400> 12  
 ggccgtctgg taccgg

16

<210> 13  
 <211> 19  
 <212> DNA  
 <213> cDNA

<400> 13  
 gtcaacaaca tagtcatca

19

<210> 14  
 <211> 23  
 <212> DNA  
 <213> cDNA

<400> 14  
 cacaggtgtg tccccaaaggaa aaa

23

<210> 15  
<211> 18  
<212> DNA  
<213> cDNA

<400> 15  
aatctggggt aggcacaa

18

<210> 16  
<211> 17  
<212> DNA  
<213> cDNA

<400> 16  
agtgtgtgtc cccaaagg

17

<210> 17  
<211> 24  
<212> DNA  
<213> cDNA

<400> 17  
cacagctgcc cgccccagg tg gcat

24

<210> 18  
<211> 17  
<212> DNA  
<213> cDNA

<400> 18  
gtcgccagtg ctccctt

17

<210> 19  
<211> 20  
<212> DNA  
<213> cDNA

<400> 19  
atcggacgtg gacgtgcaga

20